Since the war, the old narrow one lane roads have been broadened, permitting heavier auto traffic. Land ownership has been undisturbed, for it is not in an area in which the military has required land. Since the war, the villagers have tried to return to their former way of life, but this has been done with poorer houses and fewer possessions.

3

Minatogawa

Minatogawa, the second village studied, formerly was a shoe string type of settlement. Houses, shops, drinking places were along the seawall road. This pattern is now altered as a result of the war. Scattered areas have been relocated and houses built on lands formerly used for sweet potatoes. It is now an indeterminate type of village, retaining some indications of its old settlement pattern along the main road, with additions of clusters of houses in the newly settled areas.

Like Hanashiro, this village is in Oushichan township, and located on Highway 64. It is directly on the main historical road, previously mentioned, which led from Naha to the Chinen peninsula. The road, along which its houses are built, parallels for a distance the estuary of the small Minatogawa river. This narrow estuary, called Usaregawa, which connects the river mouth with the Pacific Ocean, and the small river itself (Yuhigawa) is a boundary between Oushichan and Tamagusuku townships. On either side there are steep cliffs, the sites of the best known stone quarries of Okinawa.

The settlement and the adjoining lands have an area of about 256 acres. It is a mixed economy village with three distinct occupational groups: fishermen, stonecutters, and farmers. There is a second village whose borders blend with those of Minatogawa. These two villages are now known officially as Minatogawa-ikku and Minatogawa-niku. The two terms can be awkwardly translated as Minatogawa first ward, and Minatogawa second ward. But popularly they retain their older names: Minatogawa for the fishing village, and Nagamo for the agricultural second ward. These two separate but adjoining villages were until 1925 a single village.

The division was the result of distinct differences in outlook and occupation between the two sections. Minatogawa is a fishing village and has strong ties with Itoman, a town on the East China Sea shore about 4 1/2 miles away. Nagamo is an agricultural community originally settled from Naha and Shuri. Stone-cutting operations spread over both areas. While the fishing village of Minatogawa was given the emphasis in this study, it will be necessary occasionally to include Nagamo in the discussion.[8]

8 The writer did not realize until he lived here that two villages were involved, thinking that the two wards referred to a single administrative unit. By this time the work on Hanashiro had been well started, and time did not permit the intensive study of Nagamo.

1: Glacken E-5 (1951-1952) 1953 AC7 Okinawa AC7

In addition to these varieties, cultivated locally, imported rice is distributed through the import stores. These rices generally are from Egypt, Siam, and Burma. They are not well liked and are considered to be tough (katai). Whether this is because the variety itself is disliked or because the imports were of a poor quality is hard to say, but Egyptian, Siamese, and Burmese rice are unfavorably compared with Japanese, Formosan, or the locally grown products. Okinawans are very sensitive to the types of rice. There is no such thing as "rice." Long habituation and fondness for special kinds have induced tastes and preferences which each villager is quick to express.

In Hanashiro, the main type of rice planted is also the Taichu 65, a variety which originated in Formosa, and is generally preferred. The red variety, mochigome, does not do well here, according to local farmers, and just a little is grown. Mochigome (literally, rice-cake rice) is used in making the doughy and gummy rice cakes.

5

The Sweet Potato

The cultivation of the sweet potato (satsuma imo) is a much simpler undertaking than rice culture. Fields are prepared by hand hoeing. The plow and the harrow are not used. In sweet potato cultivation, seed potatoes are first planted in a small plot. This furnishes slips or transplants for other fields. Slips are multiplied by using the tops of one field to plant another. Propagation thus is by clones, and this vegetatively reproduced plant is the mainstay of the diet.

The potato seed bed, well hoed and fertilized, is generally planted in the spring. The tops to be used as slips (kazura) are cut off and planted in rows. Practice has brought deftness in this transplanting. A small amount of soil is lifted up by the spatula, (hera), and held so that an opening rather than a hole appears. The slip is shoved into the aperture and quickly pressed down by the left heel, as the farmer moves to the next planting.[5] Few tools are used in the cultivation of the sweet potato. Only the hoe and the spatula are really needed. Occasionally one finds a special hoe with a sharp angle between the blade and handle or a heart shaped hoe with a long handle. In the Hanashiro and Nagamo areas, the solid bladed hoe is the commonest tool. Two and three pronged hoes are less often used because of the hardness of the soil.

The cultivation of the sweet potato, as we have said, is a year round operation, though planting may slacken off during the winter months.

5 Methods of cultivation have changed little in the past 100 years. The same operation is described in Hawks, Perry's expedition to Japan, II, 31-32.

244 [132] months. The amount of sweet potatoes grown is not closely related to the season. It depends much more on rainfall.

[131] [131] The effects of typhoons on the plant are most noticeable after transplanting. Salt water spray shrivels the transplants up and they die without developing. These conditions are more noticeable near the seashore in areas like Nagano that lack trees and tidewater shelters.

824 Like rice, all of the sweet potato plant is used. Plant residues are turned under to fertilize the soil. This turning under of the vines or their use in composts is a doubtful blessing if the plants are diseased. The good potatoes are reserved for human consumption. [231] The poor or the diseased ones are mashed up in a stone mortar with a long pole, used like a pestle, for pig and goat food. Besides using the tops as slips, women constantly cut them off for fresh greens for [262] the pigs. The sweet potato is the basic food because it is cheap, can be grown the year round in lowlands and uplands, and can be cultivated by all members of the family. As pig food, it is a means of [462] inexpensively raising animals which later have cash value. The feeding and care of pigs is usually one of the incidental chores of women.

294 184 The varieties most commonly found in these Okinawan villages are the Okinawan #100 (Okinawan no hyakugo) and varieties known locally as the bantō, a small round tuber, and the bokuto. The two chief differences between the northern and southern villages in cultivating the sweet potato are (1) the two and three pronged hoes are much more in evidence in the north. With practice, they can be used advantageously in quickly weeding a plot while not cutting the potato itself. (2) Matsuda appears to be less dependent on the [262] sweet potato as a human food. The farmer here has more rice for him- [231] self and a greater proportion of his sweet potato crop goes for animal food.

6

The Planting of Sugar Cane and Sugar Making

249 Sugar cane (kibi) is grown on dry crop land, its rows often alternating on the same plot with the sweet potato. Cane may be started with cuttings, or it may be a second growth (ratoon) from the stubs of the old plant after it has been cut down for crushing. Cuttings may be purchased or selected plants from another planting are used. The slips are cut to leave three buds. These cuttings may be planted in three ways: (1) all horizontally, (2) horizontally with the cutting which comes from the topmost part of the stalk planted slantwise, or (3) all cuttings may be planted slanting.

The soil must be thoroughly worked with the ever present hoe. Plowing and harrowing are rarely done. The earth must be thoroughly fertilized. In addition, small amounts of compost may be placed under the cutting, and less often liquid night soil might be used.

512 513 is more likely that the majority of adults have to be satisfied with six and a half hours.

* * *

Chapter 8

Basic Economy

INTRODUCTION

241 433 Taira depends on its fields and forests for a living. Rice and the sweet potato are the principle staple crops; wheat, beans, and vegetables are additional subsistence crops. Firewood and building materials, sugar, pineapple, and silk are main sources of cash. Tea is raised for home consumption.

311 [243] [249] Since the few rivers around Taira are short and the valleys narrow, the area available for wet rice cultivation is limited. Farm land for sweet potatoes is also not too abundant in this mountainous region and is located either on the gently sloped hills or on a few plateaus between valleys. Here and there it rises on skillfully terraced steps along the steep sides of mountains.

311 423 241 The size of land holdings and the quality of soil partly determine whether a family is able to grow additional cash crops or merely subsist. The average holding for each family is about 5 acres of rice land and 6 acres of other farming land. Yet it is important to note that the [933] range and quality of this land vary widely. Some families own only 1½ acres of rice land and an acre of other farm land, while others own as much as 14 acres of rice land and 12 acres of other farm land; good rice paddies produce three times the quantity of poor ones and are wet [511] enough to allow for two crops per year. Of the 141 families questioned, only 15 grew enough rice to be self-sufficient; 123 had to buy extra [433] rice, and only two families raised a surplus for sale. All families grew enough vegetables for home use, and only 18 bought sweet potatoes. Sixty families grew a surplus of vegetables and 16 a surplus of sweet potatoes.

243 offered at the village shrine by the priestess. Today key agricultural
[782] events are still marked by small ceremonies in which the priestess be-
[793] seeches or thanks the gods, but the actual day for planting is determined by weather and the condition of seed.

When the rice is transplanted in March, the whole family spends long hours in the paddy. Then the paddies swarm with people; some prepare the soil by spreading fertilizer, others stand in the ooze to set
[476] the seedlings. Transplanting is done by mutual assistance groups, which will be discussed later in this chapter. They guarantee everyone a sufficient number of helping hands during the painstaking, rapid work, which has to be finished within a limited time. In a few days the whole paddy area suddenly turns from brown into the tender green of the young shoots. Once planted, intermittent weeding is all the care that is needed.

[261] In July the rice turns brown and is ready for harvest. This is an event of joy for the whole village, for young rice is most delicious and
[857] loved by everyone. By then vacations have started, so that schoolchildren can help to cut rice and carry bundles to the spot where it is threshed in treadle-type machines, located either near the field or behind one's house. As soon as the rice is threshed, the grain is carried to a place in the village where the wind blows freely. There a woman holds a flat winnowing basket filled with grain at an angle to let the
[782] breeze separate the chaff from the grain. The first rice is cut by men
[264] and offered at the family shrine before the whole family eats a specially
[251] prepared gruel. Rice is usually stored in one or two oil drums in the kitchen-side corner of the front room. Better houses have a metal-lined
[256] storeroom. Once a week a supply is taken to the miller to be hulled and polished.

Those whose fields are sufficiently wet plant a second crop, and the cycle is repeated once more in midsummer, with the second harvest falling in late December.

● 244 Sweet potatoes can be planted throughout the greater part of the year if the soil is not too dry. They take from five to seven months to
[262] grow to full size. Although less popular than rice, no part of the plant
[231] is wasted. The large tubers are consumed, the small ones are usually fed to the pigs; the young leaves are used as vegetables, the older ones cooked into pig food. Slips are cut and used for planting a new crop.

The preferred variety of potato (*tadushi imu*) is grown in the dry paddies during the second rice season. To plant this potato, the soil must be piled up to form a long, narrow, flat-topped mound. One of the hardest jobs for farmers, this is done by men in the humid heat of a midsummer day. Women set the slips after the earth has been moved.
[251] These potatoes are the only variety which are thought to improve with

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stored and are kept under the house or on a special shelf on the rafters.

Onions, giant radishes, beans, and cabbages are also raised on farm lands. Night soil is rarely used for such vegetables nowadays but is still used on potatoes. Several of these vegetables as well as others are raised by women in small "home-garden" plots.

The hardest working period during the year is in July and August. Within a few weeks after the rice harvest, the soil must be made ready for the second rice crop or the soil must be prepared for dry paddy potatoes. This is also the time for planting the chief sugar crop. All this takes place during the hottest time of the year, when efficiency is greatly reduced by heat and humidity.

Sugar harvest and processing fall in the period between January and March. One field after another is harvested by the owners after arrangements have been made for a date when the cane can be processed. Such arrangements are made with the director of the Taira cooperative, who supervises operations of the sugar mill which is owned by the cooperative. The whole family helps on the day of processing. Women carry bundles of branches and light firewood to heat the kettles. The operation requires the help of someone to feed cane into the small, diesel engine driven press, some to carry the pulp away, and others to watch the kettles in which extracted juice is boiled down to molasses. Finally, a few persons stir the brown residue in wide, open pots until it becomes stalted. Then it is put into tubs that hold about 132 pounds.

The agricultural market for cash crops was totally disrupted at the end of World War II. There was no immediate outlet for sugar products; crops had been destroyed or neglected, and the sugar mill was demolished in the fighting. But by this time most people were too satisfied with the great returns from forest work to invest much time and energy in a crop which takes a year and a half to show any material results. Nevertheless, sugar was the first crop to find a market again.

Pineapple, introduced recently in Taira, has a promising future. Tea is still grown in small quantities, but few families grow more than they need for their own use, although it is a good potential cash crop for this area.

ANIMAL HUSBANDRY

Raising pigs is an important source of cash income for all households in the village. Even the poorest families own at least one, but few families have more than two; in the central village the average is about 1.2 per household. Pigs are given special care and attention.

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Many root plants such as the giant radish and carrots used to flower out, and the root would be so stringy that it could not be eaten. About nine years before the war the Japanese brought in many new and better varieties. Nanahan has more vegetables now than the rest of Tomoyose, people say, "...because our houses are scattered and we can get to the vegetable plots easily; they in Tomoyose can't, and therefore pay less attention to vegetables." Of the seven wards of Tomoyose, only Nanahan has an agreement not to keep chickens so that their vegetables will be protected. Before the war the Irish leek and swiss chard were the only abundant vegetables; others were to be had in only small quantities. The "pine mushroom", or 'metsudake', was gathered "when we used to have pines in the neighborhood." Farmers complain that they can grow less green peas now, because of the great increase in number of rats due to loss of the cat population during the invasion.

Okinawa has always been self-sufficient in sweet potatoes except in occasional time of famine. Even then, dried products of the sweet potato are often used. Many varieties are grown the year around, but in Nanahan only five main varieties were mentioned. Okinawa #100 gives the biggest harvest and in fairly fixed amounts regardless of weather. There were many of White #100 before the war, but few now. It was delicious, but the harvest gradually declined from its former high yield. Just after the war there were many of the tumai-kurū variety, but recently few have been planted. The yield had been high, but gradually the seed became bad; it was described as the "most delicious of all sweet potatoes." Yaeyamaakagu was mentioned as a variety still grown in small amounts. The variety which brings the highest market price is Kiirumugwā. This "delicious" potato yields only half that of the average, and hence its price is double.

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Perhaps the best way to view the prewar-postwar change in agriculture is to look at the amounts grown by a typical Nanahan farmer. Table I below presents this information.

Table I

Crop	Tsubo Prewar	Tsubo Postwar	Comments
Sugar cane			Postwar home use amounts to 14-15 'kin' (19-20 lb.) annually. Sells about 100 'kin' (132 lb.). Prewar, sold 1400-1500 'kin' yearly.
(summer planting)	500	350	
(spring planting)	300	150	
Sweet potatoes	700	500	Three harvests per year. Not sold much; make starch only if harvest is plentiful.
Soybeans	300	200	Generally sold about 1/3 of each prewar crop, but only when money was needed at home.
Broad beans	150	70	Prewar variety was a small plant, the postwar one very large.